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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,766	05/24/2000	Robert W. Cain	2961R-01	8090

7590 02/10/2004

THE LUBRIZOL CORPORATION
Patent Dept. - Patent Administrator
29400 Lakeland Boulevard
Wickliffe, OH 44092-2298

EXAMINER

MCAVOY, ELLEN M

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 02/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/577,766

Applicant(s)

CAIN, ROBERT W.

Examiner

Ellen M McAvoy

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 24-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 August 2003 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zakarian et al (5,888,946) in combination with either Ichihashi (4,853,139) or Holubec (4,162,985).

Zakarian et al [Zakarian] disclose tractor hydraulic fluid compositions which are multi-application lubricants that are used in transmissions, differentials, final-drive planetary gears, wet-brakes and hydraulic systems of off-highway mobile equipment. The compositions comprise a first mineral oil having a kinematic viscosity at 100°C of at least about 4.0 centistokes and a viscosity index of 129 and a second mineral oil having a kinematic viscosity at 100°C of at least about 7.0 centistokes and a viscosity index of 144. The viscosity indices of the

base oils are much higher than those commonly used in the industry. The "high viscosity index" base oils of Zakarian are also referred to as UCBO or "Unconventional Base Oils". See column 2, lines 1-38. Applicants teach in the specification on page 6, lines 5-25, that such high viscosity index UCBO base oils are suitable for use in the invention. The examiner is of the position that the base oils of Zakarian clearly meet the lubricant basestock limitation of the claims. Zakarian allows for the addition of polymers such as polymethacrylate polymers to the fluid composition and Zakarian allows for the addition of a performance additive package of conventional lubricant additives to the fluid composition. See column 3, lines 36-45. Such additives include anti-wear agents, antioxidants and flow improvers. Applicants open-ended claim language "comprising" allows for the addition of other additives to the composition including the polymethacrylate polymers of Zakarian. Applicants invention differs by further adding a polymer component to the composition such as a polyalkene or derivative thereof, an ethylene- α -olefin copolymer, an ethylene-propylene polymer, an α olefin-unsaturated carboxylic reagent copolymer, a hydrogenated interpolymers of an alkenylarene and a conjugated diene and mixtures thereof. However, such polymers are taught by Ichihashi and Holubec as additives to mineral oil compositions which may be suitable for use as gear oils and as transmission fluids.

Ichihashi discloses a lubricating oil composition having improved temperature characteristics which comprises (A) a base oil having a kinematic viscosity at 100°C of 1.5 to 50 cSt, a pour point of -25°C or lower and a viscosity index of at least 60; (B) an ethylene- α -olefin copolymer having a number average molecular weight of 1,000 to 8,000; and (C) at least one additive selected from an extreme pressure agent, an anti-wear agent, an oiliness agent and a

Art Unit: 1764

detergent/dispersant. Ichihashi teaches that the base oil may be a mineral oil (see column 2, lines 9-57) and that suitable extreme pressure agents include sulfurized olefins, phosphoric acid ester amine salts, zinc dithiophosphates and thiocarbamic acid salts. See column 3, lines 28-40.

Suitable antiwear agents include organo-boric compounds and boron-containing compounds.

See column 3, lines 41-47. The oil compositions taught by Ichihchi can be used widely and effectively as a gear oil for cars or industrial machines, and as an automatic transmission oil. See column 4, lines 44-49. Having the prior art references before the inventors at the time the invention was made it would have been obvious to have added the ethylene- α -olefin copolymer and various conventional additives such as extreme pressure and antiwear agents of Ichihashi to the mineral oil compositions of Zakarian if their known imparted properties were so desired.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation relied on by the examiner is the disclosure in Zakarian allowing for the addition of conventional antiwear/extreme pressure agents and flow improvers to the composition.

Holubec disclose lubricating oil compositions suitable for use in mechanical systems where gears are subject to great stresses and extremely high pressures such as those found in automotive rear axles and tractor transmissions which comprise (A) about 95 to about 30 weight

Art Unit: 1764

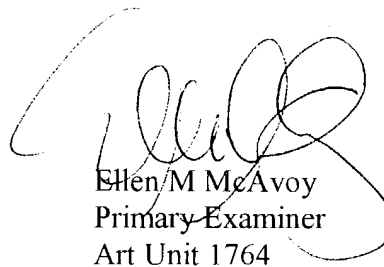
percent of a base oil, (B) at least one extreme pressure agent, and (C) at least one oil-soluble interpolymer comprising at least one monovinyl arene and at least one C₄₋₆ conjugated diene or at least one C₂₋₆ alpha-olefin. The interpolymer has a number average molecular weight of about 750 to about 10,000. See column 1, lines 10-18 and column 2, lines 12-26. The base oil may be selected from natural oils such as petroleum oils, synthetic oils, and combinations thereof. See column 2, lines 29 et seq. Suitable interpolymers are set forth in column 6, line 33 to column 7, line 6. Suitable extreme pressure agents include one or more of borate esters, sulfurized olefins, thiocarbamates, phosphites, metal dithiophosphates, phosphate salts of amines, and other conventional additives. See column 7, line 7 to column 8, line 65. Having the prior art references before the inventors at the time the invention was made it would have been obvious to have added the interpolymers and the various extreme pressure additives of Holubec to the mineral oil compositions of Zakarian if their known imparted properties were so desired. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation relied on by the examiner is the disclosure in Zakarian allowing for the addition of conventional antiwear/extreme pressure agents and flow improvers to the composition.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ellen M McAvoy
Primary Examiner
Art Unit 1764

EMcAvoy
February 2, 2004